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Each Of Us Has A Job To Do In This War For Self Preservation

Florida Growers Are Doing A Patriotic Job In Supplying Food For The Allies

The history of the Florida grower has been a succession of trials, tribulations, disasters — and successes.

Weather, economic situations, pests and lack of accord among growers themselves has made life for the Florida growers anything but a bed of roses. Yet the only effect which adverse conditions have had upon the stalwart citizens who go to make up this state's greatest industry is to harden their endurance and develop an ingenuity which is far from common in kindred industries.

Adversity has made fighters out of Florida growers.

The successes which have been liberally interspersed with our adversities have served to make our growers fully aware of the potentialities of their industry — and has enabled them to enlarge and improve their holdings.

So today, with every indication pointing to a splendid season so far as markets and prices are concerned, yet with a definite shortage of labor facing the industry, we believe that the ingenuity and aggressiveness which has been built up in the industry will find Florida growers developing a satisfying solution to every problem which they may have to overcome.

And there must be a lot of satisfaction among these growers to know that when they are whipping some problem in production or in marketing that they are performing a definitely patriotic service in doing their utmost to provide our soldiers and our civilians, and the soldiers and civilians of the allied nations with the finest fruit and vegetables which it is possible to produce.

Three Generations of Success stand Behind Your Appli- cation of ARMOUR'S this Fall

This fall when you apply Armour's to your grove, you know that three generations of successful results stand behind its performance. To help your trees store up winter energy — to help them produce fruit of finer texture and juice-quality for a warring nation — you need a fertilizer that contains the major plant foods, as well as vital secondary elements.

Armour's is rich in major and minor plant foods. It's made in Florida — especially for Florida citrus — and it's prepared scientifically, to give your trees a balanced, nourishing ration in proportion to their needs.



Thousands of successful Florida growers have the BIG CROP habit, because they know Armour's **consistently** helps produce larger yields of higher-quality citrus. BIG CROP can help **you** earn more too, from these finer yields which the market demands: So put Armour's to work in the grove at once. There's a proven analysis to help **your** trees pay dividends.

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WHEN YOU HAVE CITRUS PROBLEMS

Armour's
BIG CROP
FERTILIZERS

Whenever a citrus problem arises, drop this office a card and a long-experienced Armour field representative will visit you without obligation. He can not only suggest an analysis to suit your citrus and soil, but will gladly help you solve any problem of grove care or cultivation.

ARMOUR FERTILIZER WORKS
Jacksonville, Florida



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Our South American Relations...

C. P. HAMMERSTEIN, Hollywood
At Meeting of Florida State
Horticultural Society

Mr. President, Members and Friends of the Society:

Twenty-five years ago it was our privilege to be flying in France with but a very few practical combat planes. Twenty years ago Gen. Billy Mitchell told our Congress of this sad condition and his predictions of what we might anticipate in the future. You and I know his pleas were unheeded and today we are sadly suffering from neglectful languidness and but slowly emerging from an unprepared state of aerial chaos.

Twenty-five years ago an emergency existed and our economic requirements were found definitely lacking in many fields. Twenty years ago, yes, even longer, we have heard this eminent explorer deliver similar and even more appealing addresses to the nation, to prepare ourselves with such economic plants as the world's requirements would some day demand. You and I know his suggestions went unheeded and today we are living in a rationed status, due principally to the lack of botanical raw products.

Our baptism into the Florida State Horticultural Society was on a night such as this. We sat next to this inimitable plant explorer, concluding one of his fascinating narrations on explorations and introductions, similar to this very instructing address we have just been privileged to hear. At that time, we had just completed our primary plantings and catalogu-

ing many of his introductions in Flamingo Groves Botanic Gardens and, in answer to our question, regarding further studies on tropical and subtropical plants and fruits, his answer was most definite. "TRAVEL — travel and see them growing. Growing under natural conditions and under the most eminent horticulturalists. Visit, if you can, all sections of our country and particularly the fertile fields of Central and South America. Here you will see nature in her keenest attire. It is the finest method of adding knowledge, history and the science of growing such botanical products as will someday soon, vitally affect all of our lives." It was a most prophetic statement. One which today has proven his farsightedness in calling to our attention, many of the daily requirements of the American and United Nations.

As a result of these pertinent remarks, our vacations have been spent (as those of the proverbial postman off duty — taking a walk) inspecting all the groves and orchards within the country, attending farmers and growers institutes and university seminars. Thruout Texas, New Mexico, Arizona, California, Oregon, Washington and Canada, where, thru the courtesy of the various State Departments of Agriculture, the efficient and generous employees of the California Fruit Growers Exchange and the Pacific Fruit Exchange, four months time, passed

as though it were only a brief period of so many weeks. Our experiences with such leaders as Paul Armstrong, Henry Ramsey, Dr. Tony Lorenz, and Russell Eller of the Exchange, in their offices, thru the groves and packing houses, together with the thrill of our week end visit at the Riverside Experiment Station where our old friends Dr. J. H. Webber, Prof. Fawcett and Dr. Hodgkins and such eminent growers as David Bell and C. C. Teague, proved most valuable and convinced us that Dr. Fairchild's contentions were positively correct.

They escorted us from Escondido's vast lemon ranches, thru the historic fruit producing areas of Southern California, giving of their time and experiences so that we might view their progressive accomplishments. They related the propelling influences of the early Spanish settlers and their Mission Fathers in introducing primary plantings of their great citrus sections, mentioning that we might acquire greater and more historic facts if we traveled southward into Central and South America, from which they had emanated. Thence on, from mission to mission into Northern California, where we were greeted by another gallant group, chief among whom were Pres. Geo. Casey and his colleagues of the Pacific Fruit Exchange, the Hon. Commissioner Brock of the Department of Agriculture and the faculty of the Agricul-

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Control of Plant Bugs In Citrus Groves

J. R. WATSON, ENTOMOLOGIST,
FLORIDA EXPERIMENT
STATION

The time is now here when our growers should be on their guard against some pests that are liable to attack citrus in the fall and cause much damage; viz., plant bugs and grasshoppers. There are several species of these large plant bugs: two or three species of the brown stink bugs, and the leaf-footed plant bugs, but but most abundant and troublesome of all in the main citrus belt is the southern stink bug, often called "pumpkin bugs" by our growers.

It is this bug we have especially in mind, but control measures will also apply to other stink bugs. Pumpkin bugs have been less numerous than usual in the peninsular part of the state during the past years, but, on the other hand, especially abundant in West Florida where our satsumas grow. Nevertheless citrus growers in the peninsula should be on their guard. This scarcity in the southern part of the state has been due to a high percentage of parasitization during the previous years by the feather legged fly, the very effective parasite of these bugs that Mr. Bratley described to radio listeners last month over WRUF.

These bugs breed in greatest abundance on legumes. Of the common legumes planted in citrus groves for a cover crop their first preference is cowpeas, followed by beggarweed, *Crotalaria striata*, velvet beans, and *Crotalaria spectabilis*. As long as there are plenty of these cover crops in the grove in good, succulent condition, the bugs are not likely to go to the citrus. It is only when something happens to make the cover crop no longer attractive that they move on to the citrus fruit.

In the case of the *crotalarias* they do not care much for the leaves and stems of these plants; it is the young pods from which they suck the sap which attracts them and anything that takes the young pods off, such as a high wind, is liable to drive them to citrus. The bugs themselves, if they get sufficiently abundant, may take all the pods of *Crotalaria striata*. Then they will move on to the citrus. As these cover crops die down with the approach of the dry weather of the fall there is a continual migration to the citrus fruits,

particularly if the latter are approaching maturity.

The bugs prefer not only mature fruit, but also those varieties with a thin rind. Satsumas are the first to be damaged in the fall. Tangerines, later on, are a great favorite, followed by Hamlin oranges, Parson Browns, Pineapples, and seedling oranges. Valencia oranges and grapefruit seldom suffer severely.

The fruit, if punctured often enough by these bugs, will drop from the trees. Even those that do not drop are liable to decay in transit, as the punctures of these bugs make convenient avenues of access for various fungus diseases, so that a punctured fruit is usually a total loss. Punctured fruit is also dry and of poor flavor.

From now on until the fruit is picked, or the bugs are put into hi-

bernation by cold weather, which usually will not occur until November, the cover crop should be watched, and if there are numerous plant bugs there, it should be mowed inside of the next 2 or 3 weeks. The reason for mowing at this time is that the bugs belonging to what is usually the last generation of the fall, are now mostly in their early nymphal stages. They have no wings, therefore they cannot fly, so that if the cover crop is mown at this time the vast majority of them will perish, particularly as the fruit in the groves is not yet sufficiently mature to attract them.

It is not a bad idea, if the bugs are especially numerous, to leave a little strip of cover crop in the middle between the rows, first cutting around the trees. The bugs will then move on the strip of cover crop left

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in the middle and be drawn away from the trees. A few days later this middle strip may also be mown. The bugs will be so far away from the trees that not many of them will reach them, particularly if there are no limbs touching the ground.

In whatever manner it is done, the cutting should be thorough. After the mowing machine has gotten all that it conveniently can a man with a scythe should follow to complete the work.

We know of no spray which is effective in killing these bugs which will at the same time be safe to use on citrus. Once allowed to get on the fruit in dangerous numbers the only control measures that we know of, is to collect the bugs in nets. This is not an impossible task and can indeed be done for anywhere from two dollars to five dollars per acre. However, if the cover crop is given proper attention at this time this outlay can usually be avoided.

Many of these bugs are eaten by birds among them the domestic fowls, including chickens, turkeys, and especially guineas. We have never seen a heavy infestation of these bugs in a grove where numbers of chickens wandered regularly. Chickens, however, usually do not wander very far from the house or barn, therefore they give less protection to the more remote parts of a large grove. Guineas and particularly turkeys are more effective under such conditions.

It does not necessarily follow that all cover crops should be mown at this time of the year. If often happens that even the favorite cover crops do not harbor many bugs. They have many enemies. Besides birds and the feather legged fly, there are many insect enemies that destroy them, but the time is upon us when growers should be on the lookout for these bugs and if found in any considerable numbers, the cover crop in the grove should be mown inside the next two or three weeks.

Mowing the cover crops at this time will also reduce the damage from two other pests which are often troublesome in the fall, namely, grasshoppers and rabbits. Mowing the cover crop exposes these pests to their enemies, especially birds. Grasshoppers are with us the year 'round, but many species such as the large bird grasshopper are just now reaching the adult stage and will be more apt to damage young trees in the fall. Rabbits too are more numerous in the fall, and as other vegetation dies down, are more apt to gnaw young citrus trees.

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HEAVY SHIPMENTS REPORTED

Shipments of citrus fruits from Florida up to date show an increase of more than fifty per cent over shipments to the same date a year ago. While early season shipments were predominantly grapefruit, later reports indicate that orange shipments are now in the lead.

Up to October 23, a total of 592,543 boxes or 1481 cars had been shipped from the state, as against a total of 377,203 boxes or 943 cars a year ago. Weekend shipments, including Sunday, Oct. 25, totaled 85,202 boxes or 213 cars, which was an increase of 29 cars over the preceding week-end.

Orange shipments increased rapidly while shipments of grapefruit declined during the week-end period. Total shipments of oranges for Saturday and Sunday, Oct. 24 and 25, amounted to 51,596 boxes or 129 cars, while grapefruit shipments totaled 33,606 boxes or 84 cars. For the previous week-end, grapefruit shipments amounted to 59,147 boxes or 148.1 cars, while orange shipments were only 14,543 boxes or 36.3 cars.

The movement for the week ending Sunday, Oct. 25, totaled 326,061 boxes or 815.2 cars, of which 200,361 boxes or 500.9 cars were grapefruit, and 125,700 boxes or 314.5 cars were oranges.

For the most part, fruit is of better quality than at this time a year ago, is running generally to the more popular sizes and the demand is better than last season, due in part at least to increased purchasing power in the consuming markets.

Some canners have already begun operations, though heavy operations along this line will not be in full swing for some weeks.

So far there have been no complaints about securing transportation and with citrus fruits classed as an essential food element, growers and shippers are hopeful that adequate facilities will be provided throughout the season. All in all, both growers and shippers are viewing the prospects with a greater spirit of optimism than seemed justified earlier in the season.

BOOSTING FLORIDA CITRUS

Owing to wartime conditions, the railroads may not bring as many winter visitors to Florida as customary, but they are not neglecting Florida nor Florida's major industry — juicy, sun-ripened, vitamin-filled citrus fruit.

As evidence of this, the Atlantic Coast Line

Railroad has issued and is now distributing several million attractively designed lithographed folders in colors, exploiting the food and health value of Florida oranges and grapefruit, placing particular emphasis on the vitamin content so greatly needed at this time.

These folders are being distributed not only to patrons and prospective patrons of the Atlantic Coast Line, but also to consumers throughout the land, and particularly in those sections where Florida citrus fruits have their widest distribution.

The folder tells the story of Florida citrus in a convincing manner which cannot fail to prove of value to growers by increasing the demand for Florida fruits.

HEAVY GRAPEFRUIT YIELD INDICATED

United States Department of Agriculture estimates of the grapefruit yield for the 1942-43 season indicate a total yield of 45,155,000 boxes (exclusive of the California "summer crop" for harvest next year). This indicated production is 17 per cent above the 1941-42 crop of 38,693,000 boxes, and 7 per cent above the 42,060,000 boxes produced in the season of 1940-41.

Indicated production for Florida is 29 per cent higher than last season's yield, and Texas is estimated at 10 per cent above the crop of a year ago. The indicated production for Arizona is 18 per cent less than last season's yield, while the California crop is listed at 2 per cent less than a year ago.

The government estimate also indicates an increase in early and mid-season oranges, though much less than in the case of grapefruit. The prospective production for the entire United States is 43,620,000 boxes, compared with 42,644,000 boxes last season and 41,403,000 boxes in 1940-41. These totals are exclusive of the Valencia crop in both Florida and California.

In Florida both early and mid-season oranges and tangerines show an increase over the production of last season, with tangerine production indicated at 3,500,000 boxes against last year's yield of 2,100,000 boxes. Texas is expected to show a yield of 2,900,000 boxes of oranges as against last year's production of 2,850,000 boxes, an increase of 2 per cent.

All states except California show an indicated increase in early and mid-season oranges. California, which produced 21,742,000 boxes last season is expected to yield only 18,980,000 boxes this season.

However, while the government estimate indicates a heavy increase in grapefruit and tangerines and a slight increase in oranges, there is a general feeling of confidence among growers, shippers and the wholesale trade that the prospects for satisfactory prices are better than at this time a year ago.

When the demand is slack, the grower of fancy fruit gets a premium; when the demand is brisk, he still gets a premium. Moral — produce fancy fruit.

OUR SOUTH AMERICAN RELATIONS

(Continued from Page 3)

tural School, of the University of California at Davis. Their orchards and fruits were supreme. Their vegetables, forests and flowers magnificent. Particularly the gorgeous greenhouses containing the mammoth and elegant tuberous begonias of Vetterley and Reinault at Capitola and the historic plantings of Luther Burbank, which were so delightfully exhibited and explained to us by Mrs. Burbank. Peculiarly, in each of these interviews, some definite word in passing, referred us to the grandeur of the plantings below the Equator. Finally up, thru Oregon, Washington and Canada, we were happy to view their marvelous orchards and ending in the famous, fragrant and enormous International Rose Test Gardens in Portland, where with the greatest of all surprises we found another former Floridian in the chief capacity of Curator, the Hon. Fred Edmunds. Here again, he specifically directed our attention to Latin America, with the admonition that our education will not have been complete until we visit their plantings of high repute.

Continuously, we silently thanked our friend Fairchild for his guidance. Frequently, it was our pleasure to visit him at the Kampong, where many interesting moments were crowded with excellent council and advice on travel. His thoughts regarding the tropics have been regularly supplemented by such prominent men as Dr. Tom Barber and Wilson Popenoe — whose illuminating papers presented before the Society, have been most enlightening. These followed by the timely address of our esteemed friend Dr. P. H. Rolfs and the inspirational stories of South American opportunities, related to us by his daughter, Miss Clarissa, as we sat upon the platform together at Clearwater, definitely sealed our intentions to make South American tropics, our next vacation venture.

Finally, the opportunity presented itself in a most marvelous manner. We were fortunately invited to join a group of exchange students, professors, research and post graduates, who thru the instigation and arrangement of the International Institute of Education, sailed for a summer school to be held in the Western Hemisphere's most ancient university the Universidad Mayor de San Marcos in Lima, Peru. Imagine spending the entire summer under the tutelage of such talented educators, where, thru carefully laid plans, classroom study, lectures, excursions

and excavation parties would open up the historic past of the famed Inca and pre-Inca agriculturalists.

Prior to our arrival, however, we were privileged to spend a day at Summit, in the famous Canal Zone experiment Gardens, where many years before, thru the careful council of Dr. Fairchild and O. W. Barrett, effective plans were presented so as to make the zone more productive. Here, we were met by its amiable director, Walter R. Lindsay, who with his assistant, J. P. Keenan, gave thrill after thrill to see, taste, eat and experience many of the fruits as the incomparable mangosteens (*Garcinia mangostana*), the jackfruit (*Artocarpus intergrifolia*) and breadfruit (*A. Communis*), the mad-

runo (*Rheedia madruno*), the paboticaba (*Myrciaria cauliflora*), the cherimoya (*Annona cherimolia*), the magnificent palms, rubber producing trees, medicinal plants, towering bamboos, flowering trees and vines, orchids of rare hues, all of which provided a most practical foundation for our equatorial visits to follow.

Tasting, testing and gathering as we sailed southward, slipping into the many harbors and river towns of Columbia and Ecuador, our experiences gradually covering practically every tropical and exotic growth that Fairchild had previously emphasized. Many of these luxurious fruits were taken aboard, studied and prepared by the steward. Naturally quite a

(Continued on Page 10)

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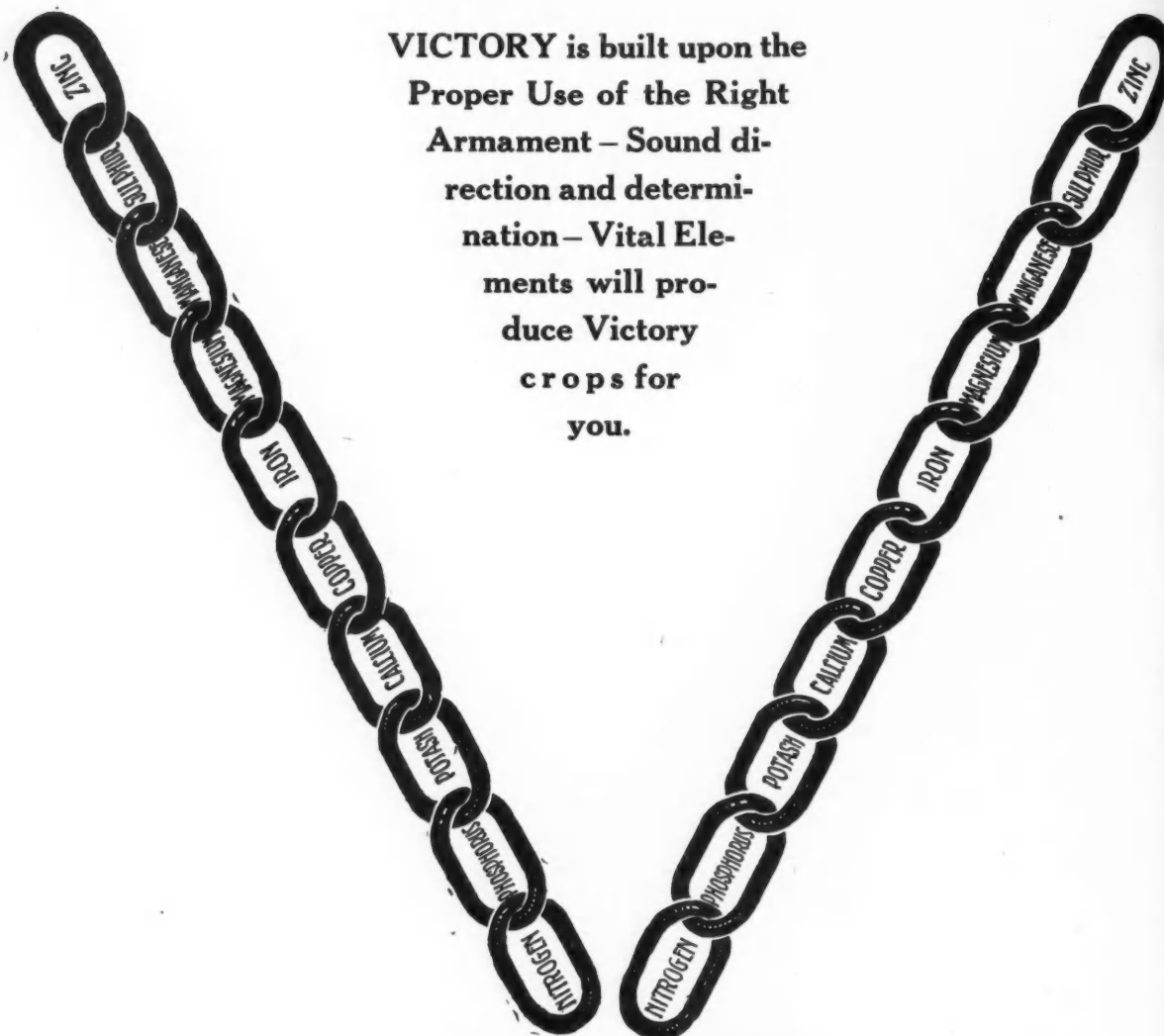
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OUR SOUTH AMERICAN RELATION

(Continued from Page 7)

few of these were new to him as well as many of our passengers — all of which definitely emphasized the tremendous possibilities existing in these fertile fields of this grand continent down under.

It seemed as tho all of Lima came to welcome us, this being the first group of exchange students to be accepted by this venerable institution.

The faculty and State Officials received us most diplomatically, while the undergraduates greeted us with great anticipation, eager to converse with us in an attempt to practice their conversational English. Even when the doors of the Presidential palace swung open, President Manuel Prado stood amongst us and very democratically shook our hands. With great cordiality, he announced that he was well pleased to have us, his brother Americans here to partake of all they had to offer — hoping it would give us the opportunity to know them, "Our South American Relations" more intimately. Truly, his sincerity made us feel as tho we had found a forgotten relative and immediately had been adopted into the family.

And so we began. Classes conducted thruout the morning on such subjects in which we desired to matriculate. The afternoons were devoted to field work, excavations and explorations of the old burial grounds, viewing the ancient fortresses and temples, surrounded by the antiquated terraced gardens of the Inca and pre-Inca civilizations. Many of the illustrated lectures, plays, folk-lore songs and native dances, concerts and receptions were held in our Grand Hotel Bolivar auditoriums in the evenings. Seventy-five percent of the courses were in English, particularly those of the eminent archeologist, Dr. Julio C. Tello. His magnetic personality and dynamic energy took us thru one of the most fascinating courses we have ever had the pleasure to study and research. He delved most interestingly into his personal researches of a lifetime. Thru a search of agricultural history of the famous Nasca during the seventh, eighth, and ninth centuries. Visiting the many marvelous museums of the city, state and college, we were thrilled by the culture of the Tiahuanacos and then to be amazed and astonished by the intricate perfection of the Incas civilization, based primarily upon the solidarity of their agricultural background. Dr. Tello's enthusiastic manner in which he aided us in our excavations, disclosed

the facts which proved our early American relations were most thoro. This enterprising group of agriculturalists as a nation, had no coinage the gold and silver belonging to the State. They cultivated their lands in a crude but most efficient manner and worked on a collective principle of one-third for the State, one-third for the Priesthood of the Sun and the balance for the people, with every one sharing the work of the State and of the religious properties. No man owned anything but the clothing he wore, the shelter he built and the crude furnishings and ornaments and pottery he moulded. And there was no poverty.

They had no written language — but fortunately for us, the story of their lives and their daily activities as well preserved in the dry, rainless, desert-like slopes of the Western Andes burial grounds. Thru the courtesy of the Peruvian Government and under the careful guidance of Dr. Tello, we uncovered the secrets of their interesting past. Unearthing the pottery or huacos, weavings, ornaments and materials surrounding the person, who hundreds of years ago had passed on to his reward, we soon were able to "read" these cleverly made, story-telling objects, depicting the lives of these ancient agriculturalists. Vested in the oldest garb we had, these excursions sometimes would take us hours and sometimes days away from our hotel, following this enthusiastic and energetic leader. North to the formidable fortress, temple and burial grounds of Paramonga, surrounded with its unique irrigation aqueducts, marvelous roads and grand gardens; northeast to the great Chillon Valley, east to the crumbling city of Cajamarquilla, in the Rimac-Lurin River Valley, uncovering a rich, commercial and religious center; upward and eastward over the world's highest standard gauge railway to an altitude of 15,860 feet to "La Cima" and thence southward and downward to the plateau valley and city of Huancaya, surrounded by three mile high mountains; south, to the famous pre-Inca city of Pachacamac (600-900 A. D.) whose huge edifice, the Temple of the Creator God, with out outstanding terraces, guarding its secrets of the past, truly thrilled and constantly surprised each of us we uncovered for the first time, many ancient secrets.

The delicately formed huacos of moulded clay gave new stories and interesting vivid pictorial history of the one whom long ago had been honored by his companions. Heads of noble warriors, industrious farm-

ers, and their gods, of course were more prominently portrayed. Then, too, the types of the particular products found surrounding them, indicated the type of grower he had been. Huacos shaped like the many varieties of potato, the pepino, tapioca, squash, berries, cherimoya, palta (avocada), papaya, drug and many other economically beautiful specimens were uncovered after many centuries of darkness. The sacred condor, favorite animal, types of fish and sea-life, hunters, methods of food preparation, making of clothing and the construction of shelter and temples as well as other skillful arts and surgical operations, were interestingly displayed. Motherhood was beautifully described in each and every phase of life. Interestingly, too, evidences of the performance of trepanning were indicated in the skulls of several bodies we exhumed.

So happy were they, that we exhibited such an unusual desire to learn, the Peruvian Government was most kind in allowing us to take back with us, a few of our excavations, such as the agricultural tools, huacos, weaving and ornaments, duplicates of which had been previously taken and recorded for their many museums. These we are pleased to have on display for you for your inspection, together with Dr. Tello's interestingly illustrated manual, "INCA," and other textbooks we used. Much can be gleaned from a short perusal of his book "INCA" which pictures in detail many of the rarer specimens of huacos, representing the early agricultural products of these ambitious ancestors. Concluding the exhibit, it is our desire that this interesting textbook become the property of the Society's library for future reference. Had our entire time been devoted to this course alone, we would have been well repaid for the entire summer we spent in Peru.

Our trip over the Andes to Huancayo and its famous markets, truly astounded us, as we passed over the ancient roads they had constructed thru the mountains, displaying a particularly related technique employed by the Romans. The agricultural skill of these ancients high up in the lofty Andes and in its higher plateau valleys, proved them to be most highly accomplished and very industrious. They invented the spade. They gave the world the knowledge of the construction of the suspension bridge. Their engineering skill in building those unique aqueducts, and evidences on their part in handling levels for irrigation facilities, truly gave them the first honors

(Continued on Page 14)



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Horticultural Hints

By J. H. Rickborn

Florida red scale is quite prevalent at this time. We have noticed it in a number of groves during the past four weeks, and since this insect spreads very rapidly we are suggesting that growers spray immediately to keep this pest under control. Red scale can cause a great deal of wood damage during the next few weeks, and it is our opinion that it is cheaper to spray at this time than to have a large pruning bill next summer. Furthermore, it is doubtful about getting cheap labor or any other kind of labor to take care of the pruning next summer.

We are inclined to "cuss" the shipper a great deal, in fact maybe more than he is entitled to be "cussed." However, we are now operating under conditions of war, and things are not as they used to be. We all realize that labor is at a premium and we urge you to cooperate with the packer in every way possible in getting your fruit to the packing house. You can take it or leave it, but unless you cooperate in this labor program you or some of your neighbors will suffer this year because they cannot have their fruit moved at the time that it should be.

We talked with the father of a boy that has been through the "hell" of many sea battles in the South Pacific. This boy is the son of Emil Karst of Orlando. He was in the Coral Sea battles. He fought through the Midway naval battles, and finally had his ship lost in the fight for Solomon Islands. This boy has recently visited his parents in Orlando and Mr. Karst is proud of his son — a boy that is fighting to the last ditch that the growers of Florida can grow and market fruit in the good old democratic way. We salute George Karst of Orlando, a "Fightin' Florida Cracker."

Bill Wells of Tavares is now operating one of the most successful caretaking organizations in the state. Bill is widely known all over the state as a man who can take over a grove that is not performing 100 percent and turn it into a winner. We are glad to have this opportunity of advising that in the future Bill will fortify his vast knowledge with the proven ability

Reports of Lyons Field Men . . .

NORTH CENTRAL FLORIDA

V. E. (Val) Bourland

We are having cooler weather but it is extremely dry and most growers have their irrigation plants going to full capacity. Some fruit is breaking color in this territory but not to a very large extent. Oranges are slow in passing maturity tests, but some grapefruit is moving from the territory with the first movements going from the Clermont section. Most growers have finished the job of cutting in their cover crops and have fire guards around their grove properties. Scale insects have been bad and there is still some oil spraying being done at this time. The crop of fruit is still showing up good in quantity, quality and sizes. Vegetable growers are busy.

SOUTHWEST FLORIDA

F. W. (Felton) Scott

There has been some activity in the citrus market lately with sales as high as \$1.50 per box on the tree for early varieties of oranges. Several cars of grapefruit have been shipped from both Bradenton and Ft. Myers and the prices have been reported as very good. We have not had any rains recently and groves are beginning to show lack of moisture, causing many growers to start their irrigation plants. Tomatoes and other vegetable crops are looking very well. However, we have had the usual insect trouble, only to a larger extent this fall. Vegetable and citrus growers are experiencing some difficulty in obtaining adequate labor and this situation may become acute when crops are ready to harvest.

NORTH CENTRAL FLORIDA

E. A. (Mac) McCartney

As reported last month our vegetable and general farm crops will be greatly reduced in this area because of the grave labor shortage. It requires a great deal of labor to handle vegetable crops at harvest time and with this certain shortage, growers are cutting their acreage to meet the shortage of

of LYONS FERTILIZERS. Therefore, it is our prediction that Bill Wells and the Lyons Fertilizer Company will create a properly deserved demand for SERVICE in this territory.

help. The Plant City and Webster sections will reduce their berry acreage from 40 to 50 percent. Our fruit is rapidly reaching maturity and buyers have been quite active for the past few weeks. Our growers have just about finished their cutting of cover crops and are now keeping a close check on rust mite and other insects. I am glad to report that we have been very successful in keeping our insects under control this season and as a result we have some very fine quality fruit.

POLK AND HIGHLANDS COUNTIES

J. M. (Jim) Sample

At this writing this section of the state is again suffering from dry weather, accentuated by hot days for this time of the year. The Frostproof and Auburndale areas are suffering worse than other sections and growers in all areas are busy with their irrigation plants. The drought has caused a delay in fruit picking because of fruit being soft that would ordinarily pass maturity tests. However, a fairly good picking of early grapefruit has been moved from Polk county already, and oranges, while later than last year, are beginning to move. We are getting our fall application of fertilizer on during the latter part of October and through November. Some oil spraying for purple scale has been necessary, and in some cases this is the second application in heavily infested groves.

HILLSBOROUGH AND PINELLAS COUNTIES

C. S. (Charlie) Little

The drought is becoming quite severe throughout this territory at the present time, with Pinellas county especially suffering as we fail to get rain. Growers in this section have had their irrigation plants going for the past several weeks. It is with great pleasure that I can report that there is more activity in buying fruit this fall than at any time since I have covered this territory — six years. We have had a number of sales at \$1.50 for early oranges and quite a tonnage of grapefruit has moved at \$1.00 per box. However, we are having a great deal of difficulty in getting fruit to pass the maturity test.

Another Successful Grower Profits By Use Of Lyons Fertilizers...



Pictured above is a man who received one of the first shipments ever made by the Lyons Fertilizer Company. This man is A. F. Pickard, manager of Pickard Bros. Company, Lakeland, Florida. Mr. Pickard has used many thousands of tons of our fertilizer, having been a continuous customer since the organization of our Company. It is

with a great deal of pride that we present this picture.

In addition to being Manager of Pickard Bros. Company which handles all grove property and real estate for Mr. Pickard, he is also owner and manager of the Pickard Insurance Agency. Mr. Pickard's organization is one of the pioneer firms of Lakeland.

OUR SOUTH AMERICAN RELATION

(Continued from Page 10)

as past-masters in the art. The fertile areas, surrounding the ancient temples, fortresses, terraced farms along the steep mountainsides, are so well preserved and in a great many cases are still being used. Their early discovery of the values of natural fertilizers has proven most valuable to mankind. Their correcting methods of soil erosion were the subjects of recent study by our experts. The results of our excavations and findings proved them to be exceptionally excellent and skilled weavers, noting that some of their textiles were more finely woven than many of our modern damasks, and in designs and colors, as beautiful as those taken from the tombs of the Egyptians. Their knowledge of medicinal plants and botanical raw-products was astounding. All in all we discovered these ancient, peace loving people well organized agriculturally, religiously, scientifically and civically.

Everyone seemed exceptionally kind and generous of their time in escorting us thru their modern groves of citrus, avocados, mangos, cherimoyas; thru their sugar, cotton and wheat fields manned by the present day descendants of that proud and dignified race of Indians, who, centuries ago, made up this vast Inca Empire. Such a person was the venerable botanist, Sir Fortunato L. Herrera, whose books are gems. Unfortunately his use of the English language was about as good as my Spanish, but finally thru the use of Latin names of plants and fruits, our conversation progressed, much to the amusement of our colleagues about us. It was thru his influence we were able to visit the experimental station and agricultural school at Mollendo. While small and having just suffered a loss due to an earthquake, interesting research and valued experiments are being developed to provide for the advancement of Peru's high variegated climatic condition of desert, jungle, mountain and plain. This grand country with over a half million square miles and a population of over six millions is approximately eleven times the size of the State of New York and a population of less than New York City. The Andes divide the country into three zones. First, the coastal or desert area, with a few scattered mountain streams supplemented by those ancient but efficient irrigation facilities, makes it possible to develop excellent sugar, cotton, and tropical fruits, with exotic flowers flaunting their brilliant

colors along the terraced farms. The flowers and vines, the palms and groves, the typical Florida homes, and beautiful ocean, constantly reminded us of our grand State.

However, it must be remembered that while located only a short distance south of the Equator, the climate is gauged by elevations. As we traveled up into the Sierras, a zone of some two hundred miles, covered with snowcapped peaks reaching up to 21,000 feet, we found bleak plateau areas, trisected by the Cordillera Occidental on the west, the Central Cordillera, and on the east, the Cordillera Oriental, wonderously beautiful and magnificently grand chain of mountains which contained the copper, lead, silver and the world's chief supply of vanadium. It was here these ancients procured their gold used in making household utensils and decorating their beautiful Inca temples and altars. On this unusual trip we discovered in great numbers, the important wool bearing llamas and beasts of burden, with his cousins the alpaca and the vicuna. Over again these scenic, Alp-like Andes and down into the jungles of the tropics, into the dense jungles of the montana. Here, alone, in Peru, will be found some 4,000 miles of navigable rivers with marvelous products of the forest — timber, fruits, rubbers and medicinal plants, growing naturally, majestically and magnifi-

cantly. It is along this eastern slope of the Andes, in the higher elevations that many noted scientists believe they have found an area, because of its unsurpassed climate, its natural fertility and general living conditions so conducive to good health, will some day be the Utopia of the world.

Then too, our visits with such individuals as the Hon. J. Fco. Ruix-Oliver, proprietor of the worlds largest and most famous orchid establishments, who without any ceremony kept us constantly provided with that exotic marvel of nature, the countless varieties of gorgeous orchids. There also, he exhibited his famous roses, unusual gardenias superb tuberous begonias and marvelous flowers, proved the advice of our friends was correct in taking time out for the investigation of the many fields of beauty and unique plantings of these ambitious South American relations. Their inherent love of beauty, made Lima and its suburbs, outstanding in landscape art, a city of rare beauty.

(Concluded Next Month)

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